DRAFT
CHESAPEAKE BAY TMDL
VIRGINIA'S APPROACH FOR SETTING INITIAL SOURCE SECTOR ALLOCATIONS IN THE WATERSHED IMPLEMENATION PLANS

[2-22-10]

Background

- The Virginia Tributary Strategies ["Strategies"] were issued in January 2005 as the Commonwealth's plan to reduce the input of nutrients and sediments in the Chesapeake Bay watershed. The Strategies outline allocations for point and nonpoint sources and implementation plans for control measures. Action has been taken to implement these strategies for all of the source sectors. Most notably, nutrient discharges from wastewater treatment plants have been reduced and significant additional agriculture BMPs have been implemented.

- Nutrient reductions by wastewater treatment plants have been accomplished by:
  1. Adoption of the *Chesapeake Bay Watershed Nutrient Credit Exchange Program* [§62.1-44.19:12];
  2. Adoption of regulations establishing nutrient loading caps and nutrient concentration limits for wastewater treatment plants;
  3. Issuance of a Watershed General Permit by the State Water Control Board, effective January 1, 2007, that authorized the discharge of nutrients from wastewater treatment plants in accordance with specified requirements, including compliance with the regulatory nutrient loading caps starting January 1, 2011; and,
  4. Funding from the Water Quality Improvement Fund and Virginia localities of approximately $1.5 billion to install the needed treatment facilities.

- NPS implementation activities have included:
  1. Work with local governments and the Virginia Soil and Water Conservation Board to increase compliance with the Virginia Erosion and Sediment Control Law and regulations from 25% in 2005 to 90% in 2010.
  2. Increased the state wide issuance of and compliance with the Construction General Permit. Adoption of stormwater non-point source nutrient offset guidance by the Virginia Soil and Water Conservation Board in conformance with the 2009 legislation that allows non-point source nutrient credits to be used by permit holders to meet their required point source phosphorus load reduction for the construction general permit.
  3. A funding stream of $20 M per year that allowed local Soil and Water Conservation Districts (SWCD) to expand their participant base and technical assistance capabilities. Districts have increased their outreach and number of farmer participants, cost sharing on BMPs that address the worst water quality problems first.
  4. Identification of Agricultural BMPs that provide the most cost effective nutrient and sediment reductions from agricultural landscapes and the focusing of eighty percent (80%) of annual cost share funding on implementation of these priority practices.
  5. Coordination of federal and state conservation programs to provide an increased number of funded practices and systems. Through coordination of program policies

and practices federal and state programs have found ways to complement each other rather than compete.

6. Revisions of Nutrient Management Regulations, effective in 2006 (Section 10.;1-104.2), to include phosphorous limitations for biosolids and animal manure applications.
7. A MOA with poultry integrators to reduce phosphorous content in litter by 30% by 2010.
8. Voluntary poultry waste transfer program implementation to move poultry litter from areas with high phosphorous soil concentrations to farms across the state that do not have high phosphorous concentrations.

How Has the Program Changed Since 2005?

- In contrast with what has been done to date, the EPA is now applying section 303(d) of the Clean Water Act to require development of a Total Maximum Daily Load [TMDL] for the Bay and its tidal rivers.
- EPA is updating the water quality and watershed models to establish the pollution caps viewed as necessary to restore the Bay. [As of mid- to late February EPA is still working on the water quality and watershed models and have not been able to produce model scenario runs for the February 26 meeting.]
- Under this new TMDL program, source sector allocations contained in the Watershed Implementation Plans ["WIPs"] must meet EPA's "reasonable assurance" test to demonstrate the reductions will be achieved.
- BMP efficiencies used in the watershed model simulations have been updated since the Tributary Strategies were produced.
- While the target loads assigned to Virginia are not final, EPA and the states have agreed that, given the tight time frame imposed by EPA for final TMDL approval, the initial target loads should be used to begin drafting the WIPs. When final allocations are assigned to the states the WIPs will need to be revised accordingly.

Build on Foundation of Tributary Strategies

- Based upon the extensive work already done we will begin developing the Commonwealth's WIPs by using the Virginia Tributary Strategies to the extent feasible.
- We will also review the Strategies to identify necessary adjustments as conditions warrant. Within the context of the TMDL, the requirement of "reasonable assurance", current BMP efficiencies, significant changes to the model, or program changes, it is possible that parts of these strategies may no longer be appropriate. Other sections of the Strategies may need to be enhanced based on experience in the Commonwealth or in other jurisdictions that demonstrates, or suggests, additional pollution reductions are achievable within specific source sectors with different actions and tools.

Proposed Steps for the Virginia Approach

1. Review the Strategies to determine which components can be carried forward into the WIPs, and whether any are no longer appropriate.

2. Based on recent legislative/regulatory actions and financial investments by the Commonwealth, maintain the current point source waste load allocations established through the Strategy process and adopted in Regulation.

3. Seek advice from subject matter experts for agriculture, urban, and septic sectors to aid in review of the types and coverage levels of BMPs needed for the WIPs.

4. Develop source sector worksheets based on currently available information that, in combination, work towards the goal of achieving the target loads assigned to Virginia.

5. Develop draft "input decks" of nutrient and sediment reduction practices based on the above analyses; will need to include final TMDL allocations [2025] as well as Stage I allocations [2017] by source sector for the 40 Virginia segment-sheds that will be assigned TMDLs by EPA.

6. Consult with Stakeholder Advisory Group ["SAG"] for comment and input on preliminary WIPs; make necessary adjustments.

7. Submit preliminary WIPs to EPA in June based on results above.

8. Make adjustments in response to EPA comments, consult with SAG, and resubmit draft WIPs to EPA in August.